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L8: Entry 4 of 16

File: USPT

Sep 25, 2001

US-PAT-NO: 6294200

DOCUMENT-IDENTIFIER: US 6294200 B1

TITLE: Pharmaceutical tablet suitable to deliver the active substance in subsequent and predeterminable times

DATE-ISSUED: September 25, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Conte; Ubaldo	Busto Arsizio			IT
Maggi; Laretta	Pavia			IT

US-CL-CURRENT: 424/472; 424/464, 424/474, 424/475

CLAIMS:

What is claimed is:

1. A tablet for pharmaceutical use suitable to release the active substances in subsequent and predetermined times, comprising a three layered core covered by a partial coating layer, said core having the following structure:

an upper layer consisting of active substance and suitable excipients to allow a fast release of the active substance when the tablet comes into contact with an aqueous medium;

an intermediate layer whose composition comprises polymeric material suitable to form a barrier able to determine a time interval between the release of the active substance contained in the upper layer and the active substance contained in the lower layer,

a lower layer comprising one or more active substances and having the same or a different composition as the upper layer, said lower layer allowing the controlled release of said active substances;

and wherein said partial coating layer consists of granulated polymeric substances, adjuvant substances and

plasticizing agents applied by compression on the whole lateral surface and on the lower base of said three layered core thus forming an impermeable barrier which resists dissolution for a predetermined period of time while allowing for the release of the active substance both from the upper layer and from the lower layer, said polymeric substances being selected from hydroxypropylmethylcellulose having viscosity between 4,000 and 100,000 cP when measured at 20.degree. C. in a 2% aqueous solution.

2. A tablet for pharmaceutical use according to claim 1 wherein the adjuvant substance used in the formulation of the partial coating layer is polyvinylpyrrolidone.

3. The tablet as claimed in claim 1, wherein said polymeric substances of said partial coating are present in a percentage of from 5 to 90% with respect to the total weight of said coating.

4. The tablet as claimed in claim 1, wherein said partial coating forms from 5 to 70% of the total weight of the tablet and shows a thickness of from 0.5 to 4.0 mm.

5. The tablet as claimed in claim 1, wherein said polymeric substance of said partial coating is hydroxypropylmethylcellulose having a viscosity of 4,000 cP.

6. The tablet as claimed in claim 1, wherein said polymeric substance of said partial coating is hydroxypropylmethylcellulose having a viscosity of 15,000 cP.

7. The tablet as claimed in claim 1, wherein said polymeric substance of said partial coating is hydroxypropylmethylcellulose having a viscosity of 100,000 cP.

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Maggi; Laretta	Pavia			IT

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Jagotec AG	Hergiswil			CH	03

APPL-NO: 08/ 795382 [PALM]

DATE FILED: February 4, 1997

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	APPL-DATE
IT	MI96A0210	February 6, 1996

INT-CL: [07] A61 K 9/24, A61 K 9/20, A61 K 9/28, A61 K 9/30

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US-CL-CURRENT: 424/472; 424/464, 424/474, 424/475

FIELD-OF-SEARCH: 424/464, 424/472, 424/474, 424/475

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<input type="checkbox"/>	<u>4160020</u>	July 1979	Ayer et al.	424/15
<input type="checkbox"/>	<u>4865849</u>	September 1989	Conte et al.	424/466
<input type="checkbox"/>	<u>4898733</u>	February 1990	DePrince et al.	424/425
<input type="checkbox"/>	<u>5213808</u>	May 1993	Bar-Shalom et al.	424/473
<input type="checkbox"/>	<u>5487901</u>	January 1996	Conte et al.	424/472
<input type="checkbox"/>	<u>5631022</u>	May 1997	Mandel et al.	424/456

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
1022171	March 1966	GB	
1346609	February 1974	GB	

ART-UNIT: 166

PRIMARY-EXAMINER: Dodson; Shelley A.

ABSTRACT:

Pharmaceutical tablet, capable of delivering the active substance or the active substances, according to a predeterminable release profile, comprising a core with an external partial coating in which said core consists of 3 layers, wherein the upper layer contains an amount of the active substance with suitable excipients, the intermediate layer consists of polymeric material with retarding barrier function and the lower layer contains the remaining amount of the active substance with suitable excipients and said external coating consists of controlled permeability polymeric materials, applied by compression to the lower surface and to the lateral surface of the core.

7 Claims, 4 Drawing figures